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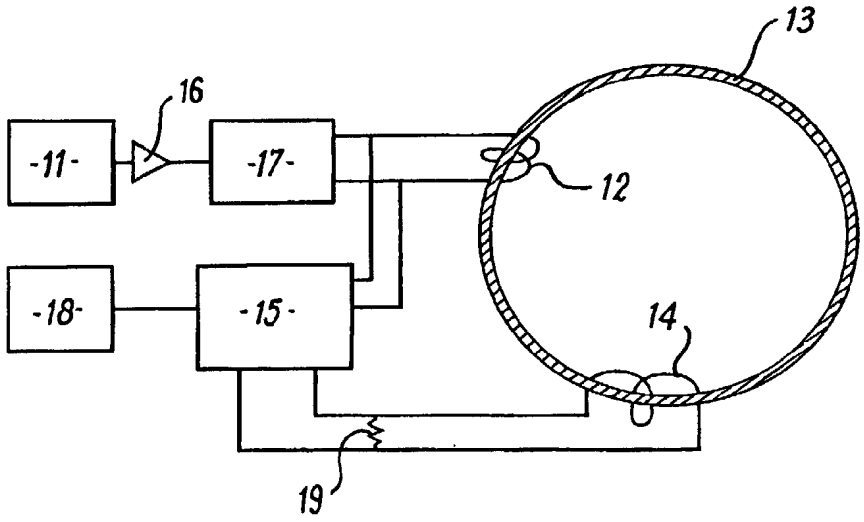
(54) Title: LOOP RESISTANCE TESTER



(57) Abstract: There is disclosed a method and apparatus for measuring loop resistance by injecting into the loop through an inductive injection probe a sinusoidal drive signal at a given frequency, preferably of the order of 1 kHz, to produce a predetermined current in the loop, measuring, by a test probe also inductively coupled to the loop, the true RMS drive voltage signal and induced current, and calculating the loop resistance from the measured RMS values. Also disclosed is a method of providing a reference loop of accurately known resistance, and a multi-value reference loop facilitating accurate measurement of fractional loop resistance.

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